Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

What is claimed is:

1-16.   (cancelled)

17.   (currently amended)   A method of providing Quality of Service (QoS) prioritization for wireless network stations in a network, said method comprising:

establishing a priority polling list comprising an identifier for at least a first wireless network station for which communication priority is desired;

polling said priority polling list to determine whether said at least a first wireless network station identified on said priority polling list is ready to communicate on said network;

granting priority access to communicate over said network to said at least a first wireless network station, wherein said priority access gives said at least a first wireless network station priority over another wireless network station excluded from said priority polling list;

scheduling, wherein said scheduling compromises receiving

priority requests from stations and adding stations to said

priority polling list upon request;

~~The method of claim 16 further comprising a scheduler~~ scheduling

~~wherein said scheduler monitors~~ scheduling ~~compromises~~

monitoring bandwidth availability; ~~when bandwidth is~~

~~available, said scheduler sends~~ scheduling ~~comprises~~

sending a priority change notice to a station to indicate

bandwidth is available and, upon acknowledgement from

said station, ~~increases~~ increasing a priority level of said

station to provide higher bandwidth to said station, when

bandwidth is available.

18. (currently amended) A method of providing Quality of Service (QoS)

prioritization for at least one wireless network station in a network, said

method comprising:

providing a coordination function that controls access to a network

comprising wireless network stations, said controlled

access occurring during a contention-free period;

providing a polling list comprising identifiers for a first group of

said wireless network stations in said network;

providing a priority polling list comprising identifiers for a second

group of <u>said</u> wireless network stations in said network,

said second group consisting of stations for which

communication priority is desired;

polling <u>said wireless network</u> stations with identifiers included in

said priority polling list to determine whether said <u>wireless</u>

<u>network</u> stations in said second group have information to

communicate; and

granting network communication access, through said coordination

function, to <u>said wireless network</u> stations within said

second group that have information to communicate.

19. (previously presented) The method of claim 18 wherein said coordination

function is a Point Coordination Function (PCF).

20. (previously presented) The method of claim 18 wherein said coordination

function controls access only during an intermittent contention-free period.

21. (currently amended) The method of claim 18 wherein stations on said polling

list, but normally excluded from said priority polling list, are intermittently

rotated into said priority polling list to prevent starvation.

22. (previously presented) The method of claim 18 wherein a multi-level priority

hierarchy is established among stations within said priority polling list thereby

granting more frequent access to higher priority stations.

23. (currently amended) A method of providing Quality of Service (QoS)

prioritization for at least one wireless network station in a network, said

method comprising:

> providing a coordination function that controls access to a network
>
> > comprising wireless network stations;
>
> designating multiple priority levels for stations within a group of
>
> > wireless network stations in said network for which
> >
> > communication priority is desired;
>
> providing a multi-level priority polling list comprising identifiers
>
> > for said group of wireless network stations in said network
> >
> > for which communication priority is desired, wherein
> >
> > stations are ranked with differing priority levels and higher
> >
> > priority stations are designated by listing their station
> >
> > identifiers ~~included~~ in said priority polling list ~~to determine~~:
>
> determining whether said stations ~~in said second group~~ on said
>
> > priority polling list have information to communicate;
>
> granting network communication access, through said coordination
>
> > function, to said stations ~~within said second group~~ on said
> >
> > priority polling list that have information to communicate;
>
> measuring characteristics of packets transmitted by a station to
>
> > determine station bandwidth; and

adjusting the number of occurrences of a station identifier in said

priority polling list so that higher priority stations have

higher bandwidth.

24. (currently amended) An apparatus for providing Quality of Service (QoS)

prioritization for wireless network stations in a network, said apparatus

comprising:

a priority polling list comprising an identifier for at least a first

wireless network station for which communication priority

is desired;

a polling unit for polling stations on said priority polling list to

determine whether said at least a first wireless network

station identified on said priority polling list is ready to

communicate on said network; ~~and~~

a coordinator ~~coordination function~~ for granting priority access to

communicate over said network to said at least a first

<u>wireless network</u> station, wherein said priority access gives

said at least a first <u>wireless network</u> station priority over

another <u>wireless</u> network station excluded from said

priority polling list~~.~~;

<u>a bandwidth monitor for monitoring bandwidth availability;</u>

a scheduler for scheduling, wherein said scheduling comprises

receiving priority requests from stations and adding stations

to said priority polling list upon request;

a priority manager for sending a priority change notice to a station

to indicate bandwidth is available and, upon

acknowledgement from said station, increasing a priority

level of said station to provide higher bandwidth to said

station, when bandwidth is available.